

Amendments to the Drawings:

The attached sheets of drawings includes changes to formerly labeled Figs. 1A, 1B, 2, 3, 4A, 4B, 5A, 5B, and 6. The two sheets formerly labeled Fig. 4A and Fig. 4B have been canceled. The sheets labeled Fig. 1A and 1B have the phrase, "Prior Art," inserted. The sheet formerly labeled Fig. 2 is relabeled Fig. 3; the sheet formerly labeled Fig. 3 is relabeled Fig. 2; the sheet formerly labeled Fig. 5A is relabeled Fig. 4A; the sheet formerly labeled Fig. 5B is relabeled Fig. 4B; and the sheet formerly labeled Fig. 6 is relabeled Fig. 5.

The attached sheets, which include Figs. 1A, 1B, 2, 3, 4A, 4B and 5, replace all the original sheet(s), including Figs. 1A, 1B, 2, 3, 4A, 4B, 5A, 5B and 6.

Attachment: Replacement Sheet(s)
Annotated Sheet Showing Changes

REMARKS/ARGUMENTS

Reconsideration of the present patent application, as amended, is respectfully requested.

Changes in the Drawings:

The drawings were objected to because they do not correspond with the written description. The drawings have been amended accordingly to correct typographical errors as follows:

“FIG. 1A” has the phrase, “Prior Art” inserted therein.

“FIG. 1B” has the phrase, “Prior Art” inserted therein.

“FIG. 2” has been relabeled “FIG. 3”.

“FIG. 3” has been relabeled “FIG. 2”.

“FIG. 4A” has been canceled.

“FIG. 4B” has been canceled.

“FIG. 5A” has been relabeled “FIG. 4A”.

“FIG. 5B” has been relabeled “FIG. 4B”.

“FIG. 6” has been relabeled “FIG. 5”.

Support for the above changes derives from applicant’s disclosure. Applicant therefore requests that the objection to the Drawings be withdrawn. No new matter has been added. Approval of the corrections is respectfully requested.

Changes in the Specification:

The specification has been amended for the purpose of improving the readability of the application and are of a clerical, typographical or grammatical nature. No new matter has been added. The change to the paragraph on page 13 corrects a typographical error.

Changes in the Claims:

Of previously pending claims 1-18, claims 1-6 were allowed, and claims 7, 8, 12 and 13 were objected to. Claims 12 and 17 were rejected under 35 USC §102(b) for being anticipated by Sundelin (US 6,091,869). Claim 13 was rejected under 35 USC §102(e) for being anticipated

by Oberg (US Patent Application Publication 2003/0128984). Claims 14-16 were rejected under 35 USC §103(a) for obvious over Oberg. Claim 18 was rejected under 35 USC §103(a) for being obvious over Sundelin.

In response, claims 7, 8, 12, 13 have been amended to overcome the objections raised in the Office Action. Claims 7, 8, 13, and 17 have been also amended to correct some awkward grammar and to further particularly point out and distinctly claim subject matter regarded as the invention. In particular, the amendments to claim 12 are supported by relabeled FIG. 4B and the present specification at page 10, line 18 – page 11, line 10 and the amendments to claim 13 are supported by relabeled FIG. 5 and the present specification at page 12, line 13 – page 13, line 2.

No new matter has been added.

Rejection under 35 USC §102(b) – claims 12 and 17

Claims 12 and 17 were rejected under 35 USC §102(b) as being anticipated by Sundelin (US 6,091,869). This rejection is respectfully traversed.

A claim must be anticipated for a proper rejection under §102(a), (b), and (e). This requirement is satisfied “only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference”; see MPEP §2131 and *Verdegaal Bros. V. Union Oil*, 814 F.2d 628, 2 USPQ2d 1051 (Fed. Cir. 1984). A rejection under §102(b) may be overcome by showing that the claims are patentably distinguishable from the prior art; see MPEP §706.02(b).

Sundelin describes a fiber (3) connected to a preamplifier (19), a splitter (47), a blocking filter (53), an add coupler (57), an amplifier (43). The splitter (47) splits the signal to a receiver (15). A transmitter (17) transmits a signal to the add coupler (57). See FIGS. 3 and 4 of Sundelin.

In contrast, claim 12 recites, “a pump connected to said first and second optical amplifier stages...”. Sundelin describes the receiver (15) coupled to the output of the preamplifier (19) and the transmitter (17) coupled to the input terminal of the add coupler (57). Sundelin does not

teach or suggest any pump connected to both optical preamplifier 19 and optical power amplifier 43.

The presently claimed invention is, accordingly, distinguishable over the cited reference. In the view of the foregoing, it is respectfully asserted that claim 12 is now in condition for allowance.

With respect to claim 17, the applicants claim, "a plurality of means...for inserting...and for splitting...". Thus each "means... for inserting...and for splitting..." was counted as one. In doing so, the applicants do not believe that Sundelin shows the recited "means for filtering out ...numbering less than said plurality of inserting and splitting means." Hence claim 17 is patentably distinguishable over the cited reference and should be allowable.

Rejection under 35 USC §103(a) – claim 13

Claim 13 stands rejected under 35 USC §102(e) as being allegedly anticipated by Oberg (US Patent Application Publication 2003/0128984). This rejection is respectfully traversed.

Under MPEP §706.02(j), in order to establish a prima facie case of obviousness required for a §103 rejection, three basic criteria must be met: (1) there must be some suggestion or motivation either in the references or knowledge generally available to modify the reference or combine reference teachings (MPEP §2143.01), (2) a reasonable expectation of success (MPEP §2143.02), and (3) the prior art must teach or suggest all the claim limitations (MPEP §2143.03). See In re Royka, 490 F. 2d 981, 180 USPQ 580 (CCPA 1974).

The Oberg add/drop filter (S_{e1-4}) connected to a bi-directional fiber (1) is asserted as acting as a coupler "splitting signals of said plurality of wavelengths from said optical fiber." This is not true. The element is an add/drop filter which separates out the wavelengths of four channels, specifically channels 1-4 (hence the subscript 1-4 in S_{e1-4}) from the optical fiber 1. The add/drop filter does not split signals of said plurality of wavelengths from said one-directional optical fiber, as recited in claim 13. Thus the entire channel bandwidth carried by the optical fiber is split by the recited coupler so that while the optical fiber still carries the entire channel bandwidth, the entire channel bandwidth is also subject to the exemplary filters 66A-66C. The

filters can select the particular channels for reception without bringing down the network. See page 12, line 13 to page 14, line 3 of the applicants' specification.

The applicants therefore submit that claim 13 recites novel subject matter which distinguishes over any possible modification of Oberg.

Rejection under 35 USC §103(a) – claim 14-16

Claims 14-16 stand rejected under 35 USC §103(a) as being allegedly unpatentable over Oberg. These rejections are respectfully traversed for at least the reason that each of the rejected claims ultimately depend on an above-discussed base claim. The arguments set forth above regarding the base claims are equally applicable here. The base claims being allowable, the dependent claims must also be allowable.

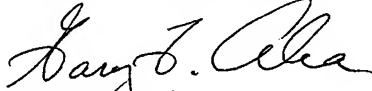
Rejection under 35 USC §103(a) – claim 18

Claim 18 stands rejected under 35 USC §103(a) as being allegedly unpatentable over Sundelin. These rejections are respectfully traversed for at least the reason that each of the rejected claims ultimately depend on an above-discussed base claim. The arguments set forth above regarding the base claims are equally applicable here. The base claims being allowable, the dependent claims must also be allowable.

Conclusion

For the foregoing reasons, the applicants believe all the pending claims 1-18 are in condition for allowance and should be passed to issue. If a telephone conference would in any way expedite the prosecution of the application, the Examiner is asked to call the undersigned at (408) 868-4088.

Respectfully submitted,

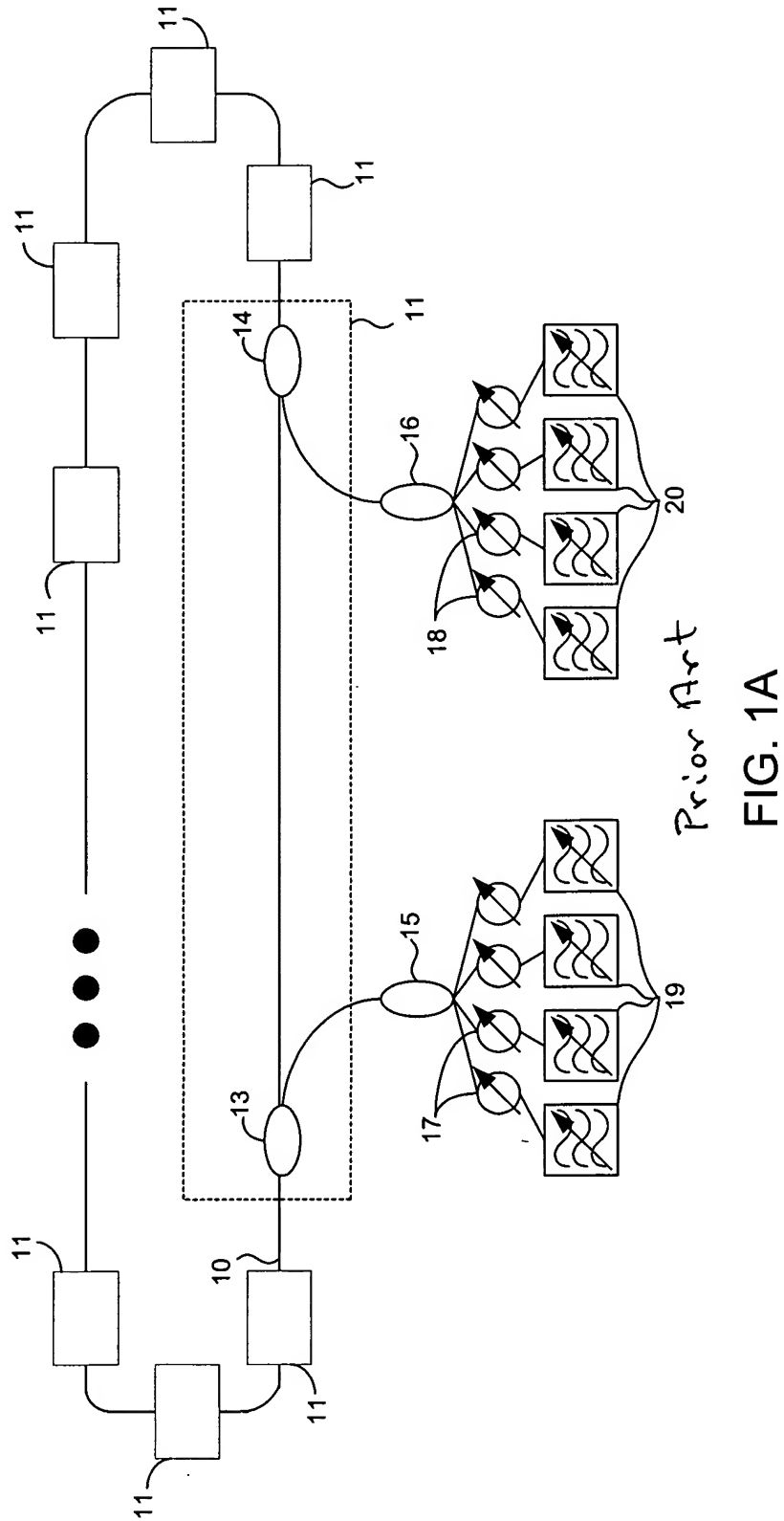


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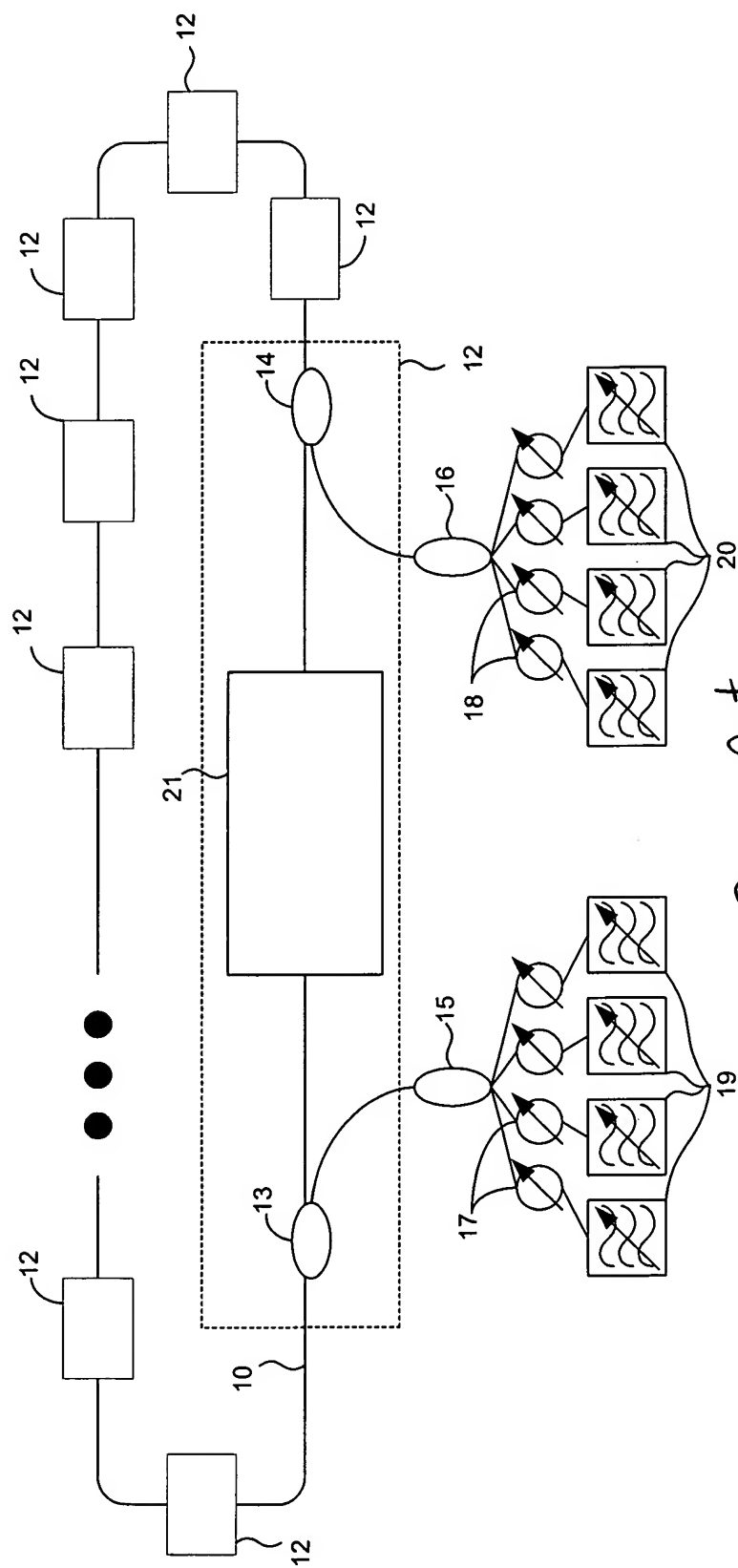
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ANNOTATED SHEET SHOWING CHANGES



ANNOTATED SHEET SHOWING CHANGES



Prior Art

FIG. 1B

2020



Fig. 2

ANNOTATED SHEET SHOWING CHANGES

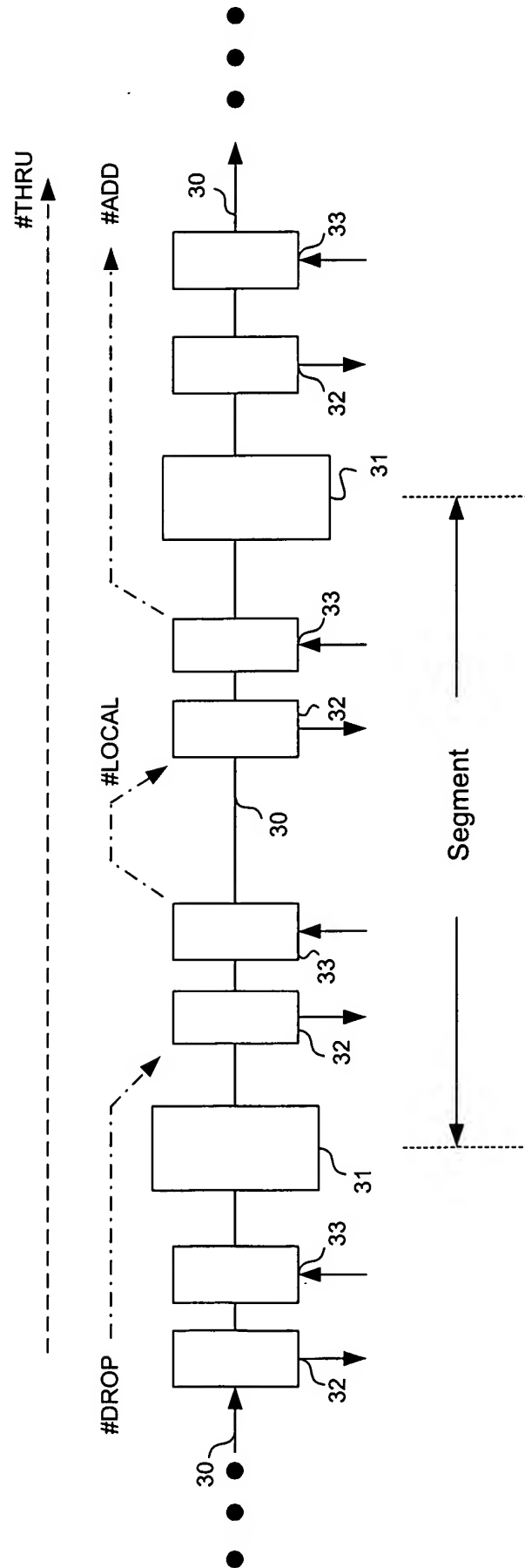


FIG. 23

ANNOTATED SHEET SHOWING CHANGES

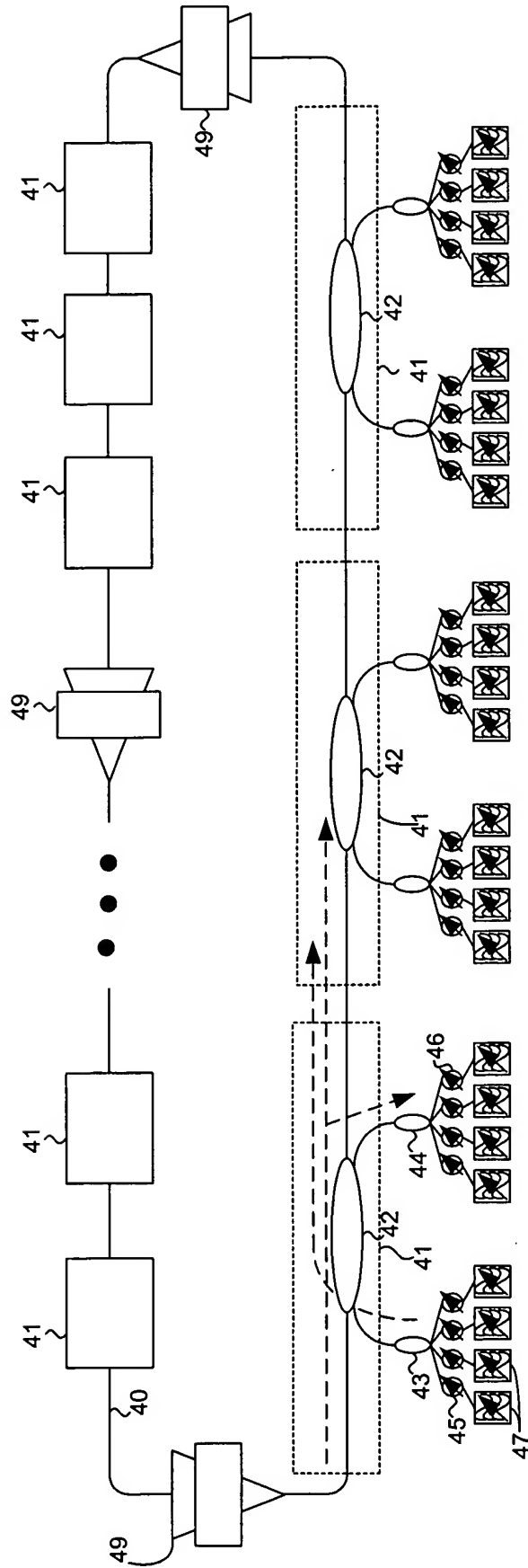


FIG. 5A-4A

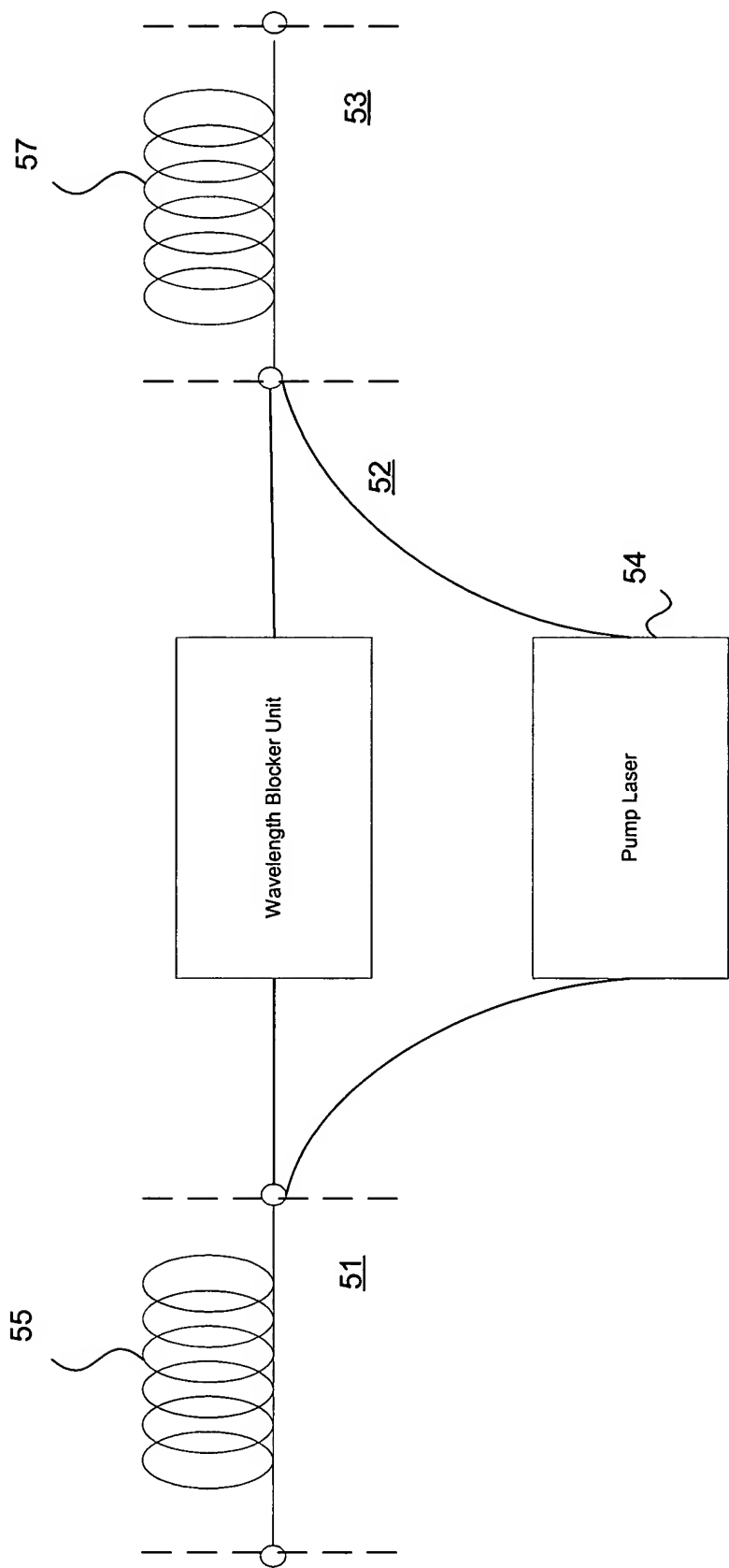


FIG. 5B 4B

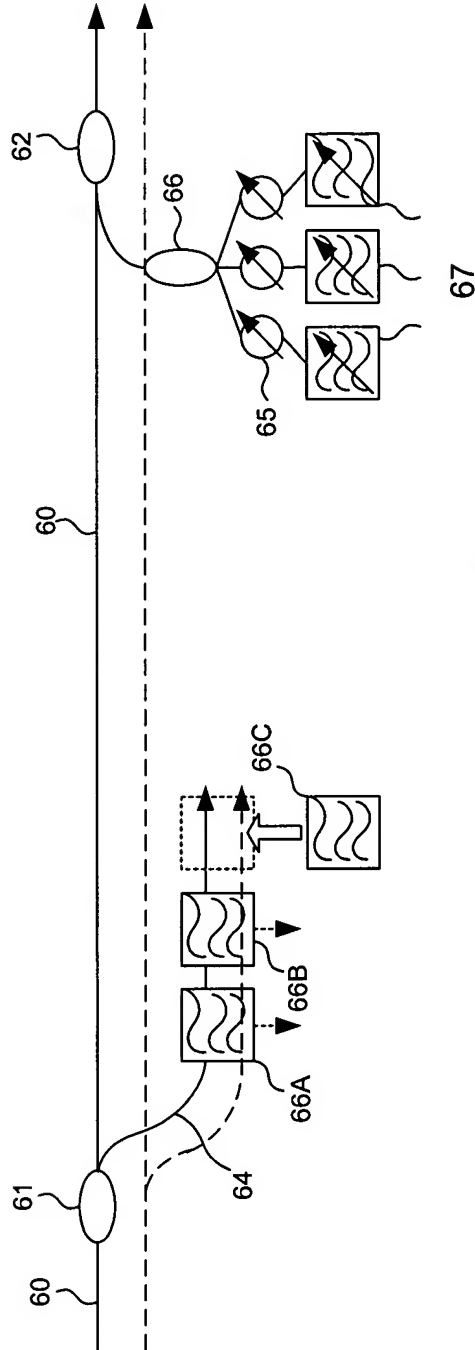


FIG. 5

ANNOTATED SHEET SHOWING CHANGES

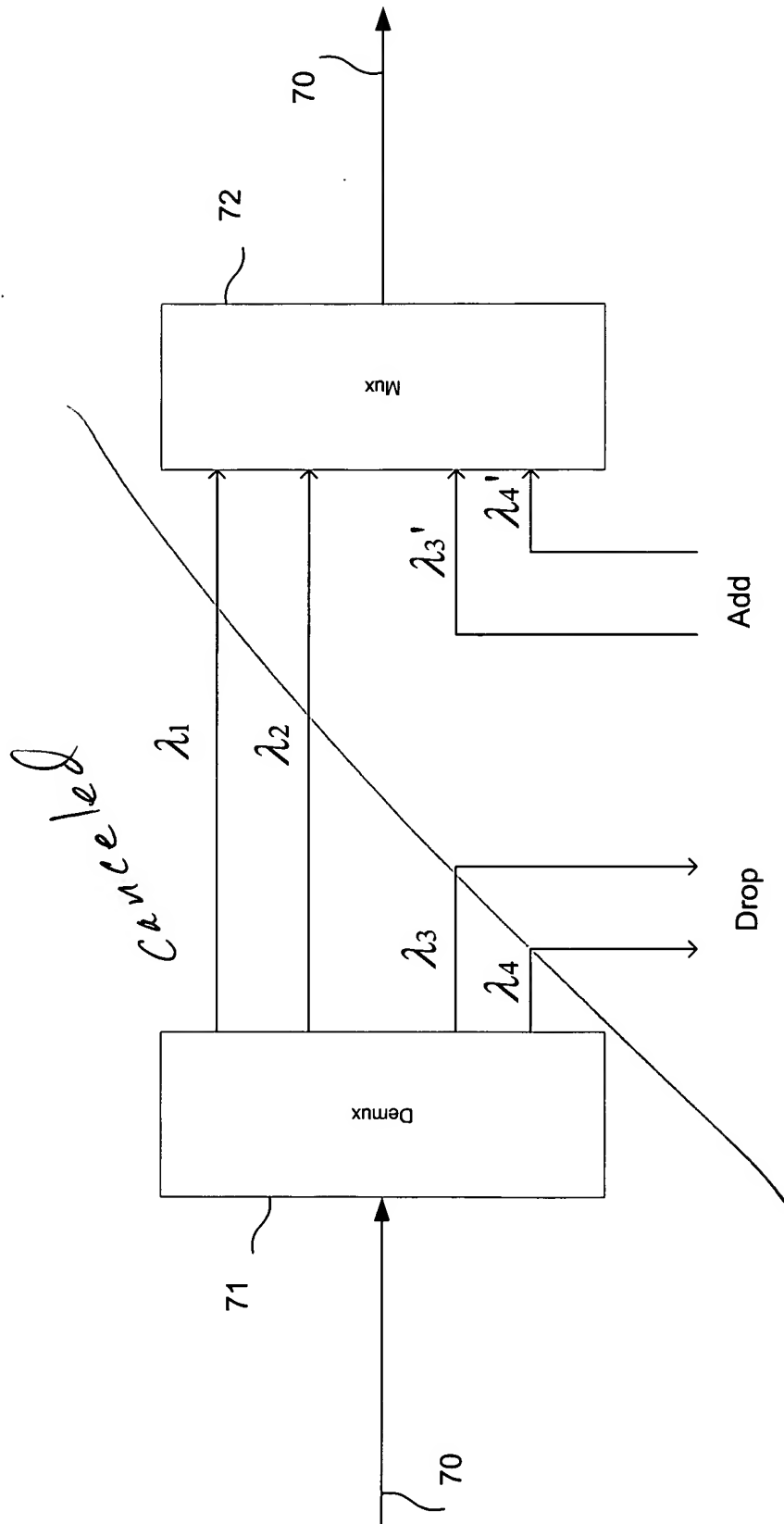


Fig. 4A

ANNOTATED SHEET SHOWING CHANGES

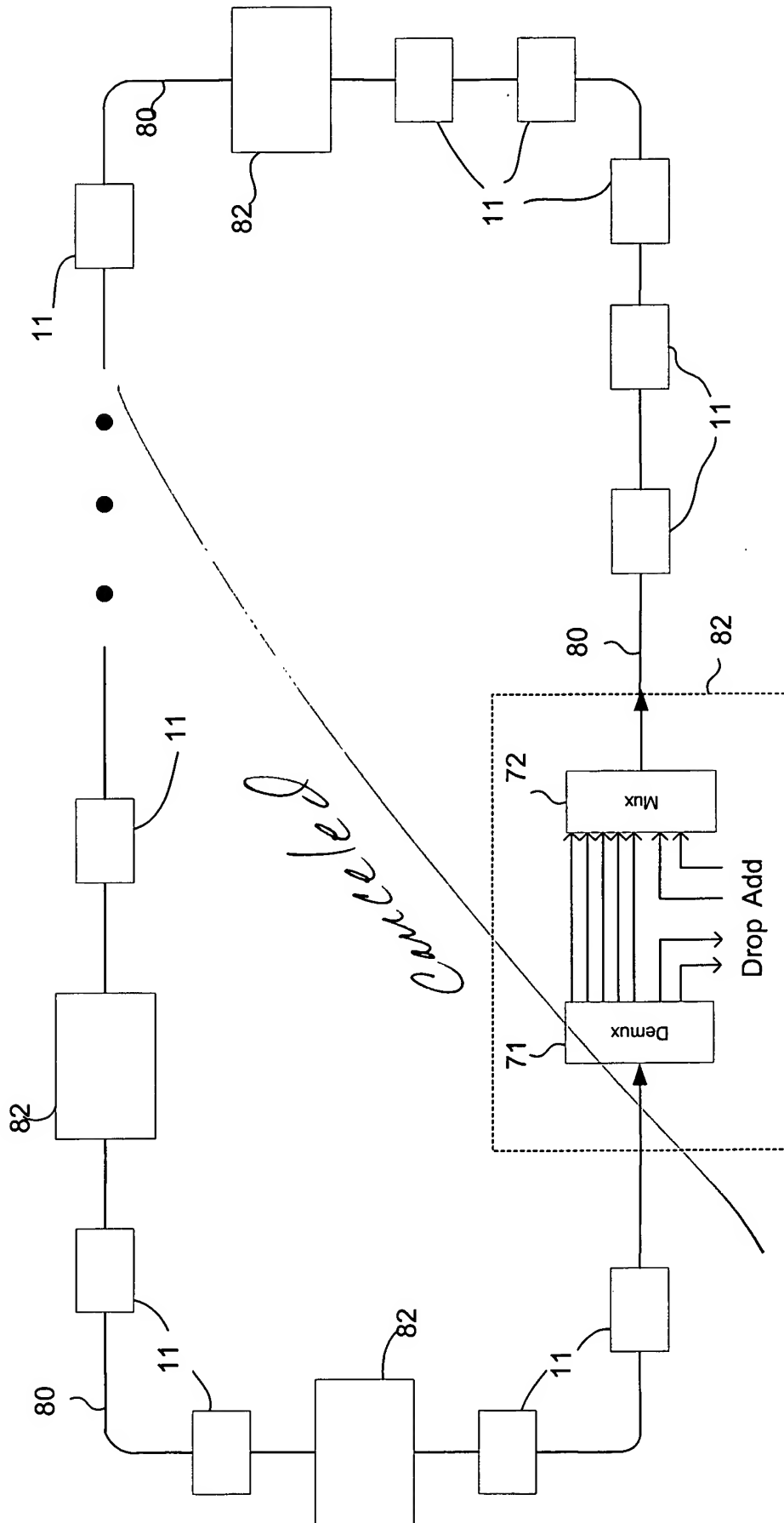


Fig. 4B